

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of April 28, 2005.

Reconsideration of the Application is requested.

Attorney Docket No.

Initially, please note that the USPTO incorrectly lists the Attorney Docket No. for the present application as D/A3194 XERZ 2 00659. Please correct and/or change the USPTO records to list the Attorney Docket No. as D/A3193 XERZ 2 00659 (i.e., as is correctly reflected in the present paper). Thank you for your attention to this matter.

The Office Action

Claims 1-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,580,895 to Hirst, et al. (hereinafter merely referred to as Hirst).

Comments/Arguments

Claims 2, 5, 6, 11, 12, 15, 17 and 18 have been cancelled without prejudice or disclaimer of the subject matter contained therein. Accordingly any objections or rejections relating thereto are now moot.

Applicant hereby traverses the rejection of claim 1.

Additionally, claim 3 further distinguishes over Hirst. Notably, Hirst does not teach stiffening the disclosed fuser roller **136** via an applied internal pressure. Rather, stiffening of the fuser roller **136** is achieved by selection of a suitably pressure resistant material, e.g., copper. See col. 5, ln. 50-52.

Moreover, claim 22 depending from claim 3 recites that the internal pressure load is applied by the working fluid having a pressure greater than or equal to approximately 135 psia at a designated operating temperature, and claim 23 depending from claim 22 recites that the designated operating temperature is between approximately 350° F and approximately 400° F inclusive. Similar to claim 22, claim 16 also recites that the working fluid has a pressure greater than or equal to approximately 135 psia at a designated operating temperature. Hirst neither teaches the particular claimed pressure of the working fluid nor the particular claimed operating temperature

range in connection with the disclosed fuser roller **136** or **602**. Accordingly, claims 22, 23 and 16 further define over Hirst.

Claim 24, depending from claim 1, recites that a wall of the fuser roller is formed from a material having a thickness less than or equal to approximately 0.3 mm, and therefore also further defines over Hirst. Hirst only discloses that the walls of the tubes are approximately 0.06 or 0.08 inches in thickness. This is as much as approximately 8 times the claimed thickness.

Claim 4 also further distinguishes patentably over Hirst. The claim as amended expressly recites that the working fluid is methanol or a combination of methanol and water. Nowhere does Hirst teach that the working fluid includes methanol. Hirst only discloses water and ethylene glycol.

Claim 7 also distinguishes further over Hirst. Claim 7 recites that the wall of the fuser roller is made from a magnetic material. Hirst fails to teach this feature. Rather, Hirst only teaches that the tubes **210** and **212** are made from "a metal such as aluminum, copper, or steel." See col. 5, ln. 49-50. Simply because the tube is metal does not mean it is magnetic. In fact, copper and aluminum are typically non-magnetic materials and steel likewise may be a non-magnetic material. Accordingly, being metal is not equivalent to being magnetic, and teaching that something may be made from metal is not the same as teaching that it is in fact magnetic. Nowhere does Hirst teach that the tube is magnetic, rather Hirst merely teaches that the tube is metal.

Claim 8 recites that the wall of the fuser roller is formed from a nonconductive material having magnetic particles embedded therein. Accordingly, claim 8 further distinguishes over Hirst. Hirst nowhere discloses such a fuser roller wall. Should the Examiner contend otherwise, it is respectfully requested that he identify the exact passage and/or figure where such a wall is disclosed. Notably, the outstanding Office Action lacks any citation in this regard.

Claim 9 recites that the fuser roller is equipped with a pressure relief system to protect against over pressurization. Moreover, claim 25 recites that the pressure relief system includes an automatic pressure release valve. These claims accordingly define over Hirst which shows neither feature. The Office Action cites to element **408** of Hirst as illustrating the claimed pressure relief system. However, Hirst explicitly teaches that "Once evacuation has been completed, the interior space **306** is sealed, for example by

crimping the port **408** or welding or braising it shut." See col. 7, ln 11-13. Consequently, port **408** cannot act a pressure relief system or automatic pressure release valve insomuch as it is sealed shut and it does not therefore relief or release any pressure.

The rejection of claim 10 is also hereby traversed.

Additionally, claim 13 further defines patentably over Hirst. Amended claim 13 now recites that inductive heating is achieved via production of magnetic hysteresis or a combination of magnetic hysteresis and eddy currents in a wall of the heat pipe. Hirst only teaches that eddy currents are used to generate heat in the tube. See col. 8, ln. 46-50. Nowhere does Hirst disclose using magnetic hysteresis to induce heating.

Claim 14 calls for inductively heating the heat pipe by electrically energizing an electrical coil inductively coupled to and surrounding the heat pipe. Similarly, claim 21 calls for the electric coil to surround the fuser roll. As clearly shown in FIGURE 6, the coil **628** of Hirst does not surround the heat pipe or fuser roller **602** contrary to the express language of the claims. Therefore, claims 14 and 21 also distinguish patentably over Hirst.

Currently amended independent claim 19 is directed to a fusing station for fusing toner to an image receiving medium. The fusing station includes: distribution means for evenly distributing heat, said heat distribution means including a heat pipe; means for inductively heating the distribution means, wherein the means for inductively heating includes an electrical coil inductively coupled to and surrounding the heat pipe; and, means for pressing a page of toner carrying image receiving medium to the heat distribution means. Hirst teaches no such means for inductively heating. In contrast to the claim, Hirst clearly shows in FIGURE 6 and explicitly teaches in col. 8, ln. 20-49 that the electric coil **628** does not surround the heat pipe or fuser roller **602**. Accordingly, claim 19 distinguishes patentably over Hirst, along with claim 20 depending therefrom.

CONCLUSION

For the reasons detailed above, it is submitted all claims remaining in the application are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

No additional fee is believed to be required for this Amendment A. However, the undersigned attorney of record hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Deposit Account No. 24-0037.

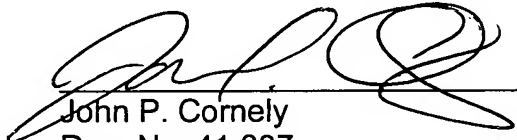
In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call the undersigned, at Telephone Number (216) 861-5582.

Respectfully submitted,

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August 29, 2005

Date



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